

**Appl. No.** : **10/729,017**  
**Filed** : **December 5, 2003**

## **REMARKS**

In response to the Office Action mailed June 28, 2005, and as stated in the June 24, 2005 interview, Applicant elects claims 9-16, 20, and 21 as the species for prosecution. Claims 9, 10 and 20 are amended herein and contain no new subject matter. Claims 22-26 are new and also contain no new subject matter. Accordingly, claims 9-16 and 20-26 are respectfully submitted for further examination.

### Election/Restrictions

The Office Action states:

“[t]his application contains claims directed to the following patentably distinct species of the claims invention:

Group I, illustrated in figures 1A, 1B and 1C – claims 1-8 and 17

Group II, illustrated in figures 3A, 3B and 3C – claims 9-16, 20 and 21

Group III, illustrated in figures 4 and 5 – claims 18 and 19

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there is not generic claim.” ...

The Office Action also states

“During a telephone conversation with Greg Hermanson on June 24, 2005 a provisional election was made without transverse to prosecute the invention of Group II, claims 9-16, 20 and 21.

Affirmation of this election must be made by applicant in replying to this Office action. Claim 4, 9-16 and 18-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.”

In the telephone interview on September 14, 2005, Applicant confirmed with Examiner Harvey that the above-quoted statement “Claim 4, 9-16 and 18-21 are withdrawn from further consideration by the examiner” is merely a typographical error, and that the elected claims are claims 9-16, 20, and 21. Applicant respectfully submits the claims are not limited by the figures referenced above as being associated with each group. Instead, certain elements of claims 9-16, 20, and 21 are illustrated in multiple figures, and in particular figures 4 and 5 which illustrate embodiments comprising a substantially cylindrical primary enclosure.

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Discussion of Rejection of Claims 9-16, 20, and 21 under 35 U.S.C. §102

Claims 9-16, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilke (US 5,710,395). Applicant respectfully traverses these rejections and submits that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. *See M.P.E.P. § 2131.*

Claims 9 and 20

Claims 9 and 20 are amended herein. Applicant respectfully submits that Wilke does not expressly teach or suggest all the limitations of claims 9 and 20, including a speaker system comprising

“a transition section having a first open end coupled to the open end of the primary enclosure and a second open end substantially opposite the first open end, the second open end coupled to one end of the port section, said transition section tapering from a dimension of said primary enclosure to a dimension of said port section.”

Claims 9 and 20 (amendment underlined).

In the Office Action, the Examiner “interprets structure **70** as reading on a ‘transition section’ having a first open end **75** coupled to the open end of the primary enclosure ... [and a] second open end **80** coupled to one end of the port section **91.**” Wilke discloses a speaker with a structure **70** (resonance pipe) that “operates to connect the interior chamber **5** of the speaker housing **10** to the outside air through exit port **80.” Wilke, col. 4, 65-67. However, Wilke discloses that structure (transition section) **70** has a consistent diameter along its entire length and does not taper. Wilke FIGs. 2-8. Thus, Wilke fails to disclose or suggest the limitation of a transition section “tapering from a dimension of said primary enclosure to a dimension of said port section” as claimed in claims 9 and 20. Accordingly, Wilke does not anticipate claims 9 and 20 under 35 U.S.C. §102 because each and every element as set forth in the claim is not expressly found in Wilke.**

Furthermore, Applicant respectfully submits that the Helmholtz resonator chamber of Wilke does not inherently describe the limitations of claims 9 and 20. “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to support the determination that the inherent characteristic necessarily flows from the teachings of

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the applied prior art.” *See M.P.E.P. § 2112.* Applicant respectfully submits that the Helmholtz resonator speaker housing 10 of Wilke need not necessarily have a “transition section tapering from a dimension of said primary enclosure to a dimension of said port section” because it discloses other embodiments without this characteristic. Thus, Applicant respectfully submits that since Wilke does not inherently teach or suggest all the limitation of claims 9 and 20.

For at least the above-stated reasons, Applicant respectfully submits that since Wilke does not teach or suggest each and every element of claims 9 and 20, and thus claims 9 and 20 are not anticipated and are in condition for allowance.

#### Claims 10-16, 21-26

Accordingly, for at least the reason that claims 10-16 and 21-26 are dependent either directly or indirectly from claims 9 and 20, Applicant respectfully submits claims 10-16 and 21-26 are also not anticipated and are also in condition for allowance.

#### Claim 16

The Examiner refers to Example 2 (shown below) as teaching limitations of claim 16:

#### Example 2

“To demonstrate the use of very thin materials for the wall of the Helmholtz resonator chamber, enclosures were made of two recyclable plastic soda bottles, both with a volume of approximately 6 fluid ounces. The bottle material is a flexible, approximately 1/24th inch thick, PET thermoplastic. The speakers mounted were small Audax speakers of 2.5 inch diameter capable of large power handling of approximately 30 watts RMS. Even at very high sound levels, panel resonances were virtually absent. These enclosures produced unparalleled bass with a weight of approximately 4 ounces each without speakers.” Wilke col. 8, 24-34.

The examiner asserts “Wilke does not teach that additional apertures were provided in the bottle loudspeaker enclosure, thus being interpreted as using the bottle neck as the port section of the loudspeaker enclosure.” Applicant respectfully traverses this rejection, and asserts that Wilke does not anticipate claim 16 because it does not disclose or suggest, expressly or inherently, the claim 16 limitation “wherein the port section comprises a neck of a bottle.”

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After a careful reading of Wilke, Applicant respectfully submits that Example 2 merely discloses the use of “thin wall materials *for the wall* of the Helmholtz resonator chamber,” that is, the walls can be made of “recyclable plastic soda bottles,” not that the bottle itself *as a whole*, or that the neck of the bottle in part or whole, is used as any portion of the Helmholtz resonator chamber or the resonator tube 70 (interpreted by the Examiner as a transition section). Wilke does not expressly teach or suggest the use of the neck of a bottle for any purpose. In fact, Wilke does not disclose any embodiments using thin wall material that are any different than those shown in Figures 1-8. Thus, Wilke does not expressly teach or suggest the claim 16 limitation “wherein the port section comprises a neck of a bottle.”

Applicant also respectfully submits that the Helmholtz resonator chamber of Wilke does not inherently describe the limitation of claim 16. As described above, Wilke describes “the Helmholtz resonator of the present invention [as having] ... a capsule shape that may be truncated at one or both ends.” Wilke, col. 3, 48-50, Figs. 1-8. Therefore, embodiments using the thin wall material in Example 2 should also be interpreted as inherently having a capsule shape that may be truncated at one or both ends. Such a structure precludes using the neck of the bottle as a port section because the neck of the bottle protrudes from the end of the bottle and thus does not conform to the required capsule shape. Alternatively, if the neck of the bottle was removed so that the remaining portion of the bottle conforms to the capsule shape, or if that end of the bottle having the neck was truncated as described in Wilke, the removed bottle neck could not be used as the port. Moreover, the Helmholtz resonator speaker housing disclosed in Example 2 need not necessarily have a “port section comprising a neck of a bottle” because Wilke discloses other embodiments with apertures that do not have a port section comprising a neck of a bottle. Thus, Applicant respectfully submits that since Wilke does not inherently teach or suggest all the limitation of claim 16.

Accordingly, for at least the reason the foregoing reasons, Applicant respectfully submits claim 16 is also not anticipated and is therefore also in condition for allowance.

#### Claim 10

Regarding claim 10, the Examiner asserts “Wilke teaches that the speaker driver 60 is mounted to the closed end of the primary enclosure, as broadly claimed.” Claim 10 is amended

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herein to read “[t]he speaker system of Claim 9, wherein the speaker driver is mounted to the closed end of the primary enclosure such that the front face of the speaker driver is about perpendicular to the axis of the primary enclosure and the front face of the speaker driver forms at least a portion of the closed end of the cylindrical primary enclosure.” No new matter is added by this amendment. Wilke at least does not teach or suggest the “front face of the speaker driver is about perpendicular to the axis of the primary enclosure and the front face of the speaker driver forms at least a portion of the closed end of the cylindrical primary enclosure.”

For at least the foregoing reasons, Applicant respectfully submits that claim 10 is not anticipated by Wilke, and accordingly that claim 10 is now in condition for allowance.

### **CONCLUSION**

The applicant has endeavored to address all of the Examiner’s concerns as expressed in the outstanding Office Action. Accordingly, amendments to the claims for patentability purposes pursuant to statutory section 102, the reasons therefor, and arguments in support of the patentability of the pending claim set are presented above. In light of these amendments and remarks, reconsideration and withdrawal of the outstanding rejections is respectfully requested.

Any claim amendments which are not specifically discussed in the above remarks are not made for patentability purposes, and it is believed that the claims would satisfy the statutory requirements for patentability without the entry of such amendments. Rather, these amendments have only been made to increase claim readability, to improve grammar, and to reduce the time and effort required of those in the art to clearly understand the scope of the claim language. Furthermore, any new claims presented above are of course intended to avoid the prior art, but are not intended as replacements or substitutes of any cancelled claims. They are simply additional specific statements of inventive concepts described in the application as originally filed.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

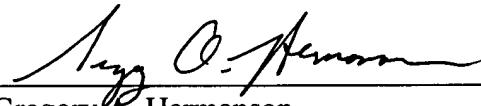
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Respectfully submitted,

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